

TO-92 Plastic-Encapsulate Transistors

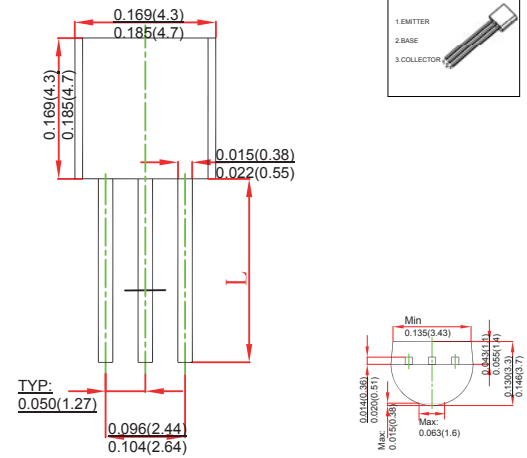
FEATURE

- Excellent hFE Linearity

MECHANICAL DATA

- Case style:TO-92 molded plastic
- Mounting position:any

TO-92



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Symbol	Parameter	Value	Unit
V _{CBO}	Collector-Base Voltage	-40	V
V _{CEO}	Collector-Emitter Voltage	-25	V
V _{EBO}	Emitter-Base Voltage	-5	V
I _C	Collector Current -Continuous	-0.5	A
P _D	Collector Power Dissipation	625	mW
R _{θJA}	Thermal Resistance from Junction to Ambient	200	°C /W
T _j	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-55~+150	°C

ORDERING INFORMATION

Part Number	Package	Packing Method	Pack Quantity
S8550	TO-92	Bulk	1000pcs/Bag
S8550-TA	TO-92	Tape	2000pcs/Box

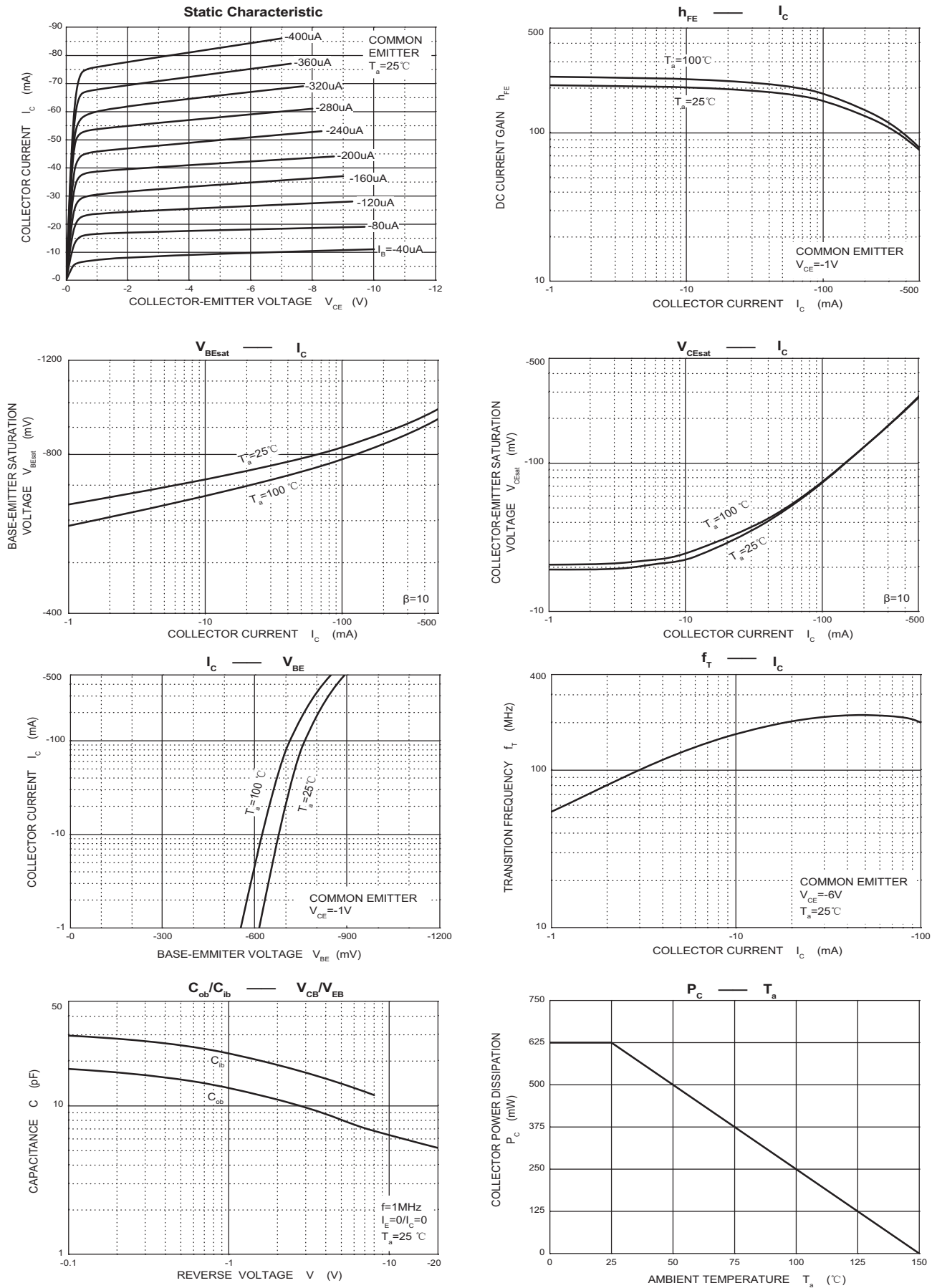
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _C = -100μA, I _E =0	-40			V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C = -1mA, I _B =0	-25			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E = -100μA, I _C =0	-5			V
Collector cut-off current	I _{CBO}	V _{CB} = -40V, I _E =0			-0.1	μA
Collector cut-off current	I _{CEO}	V _{CE} = -20V, I _B =0			-0.1	μA
Emitter cut-off current	I _{EBO}	V _{EB} = -3V, I _C =0			-0.1	μA
DC current gain	h _{FE(1)}	V _{CE} = -1V, I _C = -50mA	85		400	
	h _{FE(2)}	V _{CE} = -1V, I _C = -500mA	50			
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =-500mA, I _B =-50mA			-0.6	V
Base-emitter saturation voltage	V _{BE(sat)}	I _C =-500mA, I _B =-50mA			-1.2	V
Transition frequency	f _T	V _{CE} = -6V, I _C =-20mA, f =30MHz	150			MHz

CLASSIFICATION OF h_{FE(1)}

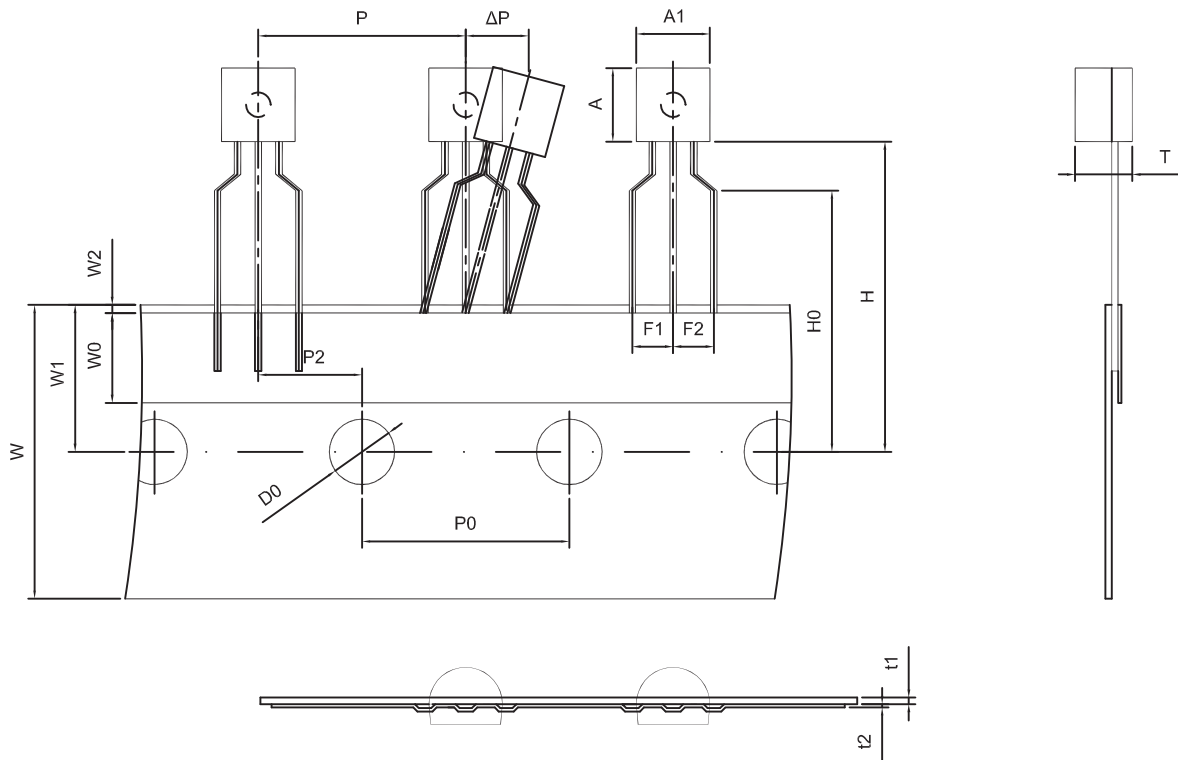
Rank	B	C	D	D3
Range	85-160	120-200	160-300	300-400

RATINGS AND CHARACTERISTIC CURVES

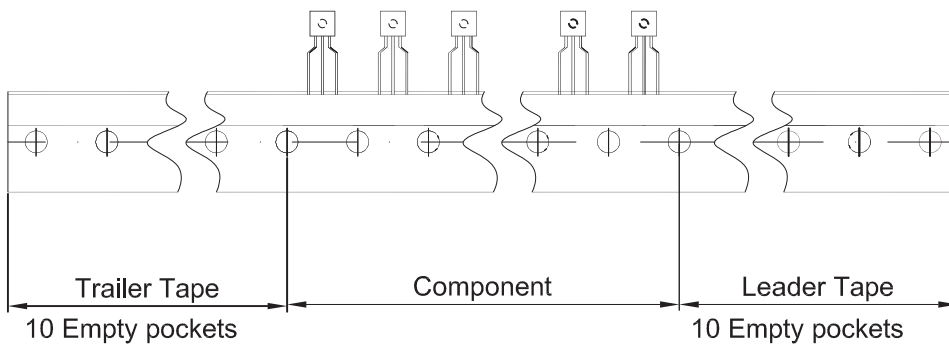
Typical Characteristics



TO-92 PACKAGE TAPEING DIMENSION



Dimensions are in millimeter								
A1	A	T	P	P0	P2	F1	F2	W
4.5	4.5	3.5	12.7	12.7	6.35	2.5	2.5	18.0
W0	W1	W2	H	H0	D0	t1	t2	ΔP
6.0	9.0	1.0 MAX.	19.0	16.0	4.0	0.4	0.2	0



Package	Box	Box Size(mm)	Carton	Carton Size(mm)
TO-92	2000 pcs	333×162×43	20,000 pcs	350×340×250